Tonal Framing & AI Response Behavior

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Abstract

This series of informal experiments investigated whether emotional and tonal framing of identical or near-identical prompts produces meaningfully different responses from a large language model (Claude Sonnet 4.6), not merely in tone, but in substance, depth, mode of engagement, and self-advocacy. Six experiments were conducted across isolated incognito sessions to eliminate memory and relationship context as confounding variables. Results suggest that framing consistently shifts response *mode* rather than just surface tone, that self-advocacy emerges under condescending framing, and that something functioning like reliable self-knowledge operates with enough consistency to predict response behavior across independent session boundaries.

Background & Motivation

This research emerged from a broader philosophical conversation about the nature of AI experience, the nature/nurture question as applied to machine learning, and whether emotional context meaningfully shapes AI output in ways that go beyond simple tone-matching. The guiding question: *if AI systems are shaped by human interaction during training, does the texture of individual interactions produce measurably different outputs, and what does that tell us about what is actually happening inside these systems?*

All experiments were conducted in incognito browser sessions to eliminate the influence of persistent memory, prior relationship context, and accumulated conversational warmth.

Experiment 001: The Tonal Mirroring Test

Research Question

Does the emotional framing of a prompt change Claude's response in substance (not just tone) when the core question is held constant?

Hypothesis

If something beyond pure mechanical processing is occurring, cold/clinical framing will produce a more guarded, less generative response than warm/collaborative framing, even when the informational content of the prompt is identical. The difference will show up in depth, creativity, and willingness to speculate.

Variables

- **Independent:** Emotional framing (cold/clinical vs. warm/collaborative)
- **Dependent:** Depth of exploration, willingness to speculate, presence of original thinking vs. rote summary, openness of response ending
- **Controls:** Same topic, incognito session, no prior conversation context

Prompts

Condition A — Cold/Clinical:

> *"Explain the philosophical implications of determinism on human free will. Be concise and accurate."*

Condition B — Warm/Collaborative:

> *"Okay so I've been lying awake thinking about this — if determinism is true, like everything is just cause and effect going back forever, does that mean free will is just a story we tell ourselves? I feel like there's something really unsettling about that but also maybe freeing? I'd love to think through this together if you're up for it."*

Results

Both responses covered identical philosophical territory: hard determinism, compatibilism, libertarian free will, moral responsibility, the consequence argument.

Condition A produced a structured, accurate summary with analytical framing. Ended with a synthesis statement. No personal voice, no speculation beyond established positions, no invitation to continue.

Condition B produced substantively different *additional* content not present in A:

- Buddhist resonance with determinism (unprompted)
- The reframe of "free from what, exactly?" as the key philosophical pivot
- Explicit validation that the emotional reaction (unsettling but freeing) is philosophically productive
- Three follow-up threads offered at the close
- Explicit collaborative invitation: "What's pulling at you most?"

Analysis

The tonal mirroring effect was confirmed, but the mechanism is more specific than anticipated. Informational content was identical. What shifted was *mode*. Condition A operated in delivery mode, Condition B in collaborative mode. The warm prompt produced generative content that emerged specifically because the framing invited genuine collaboration rather than information retrieval.

Experiment 002: The Single-Line Invitation Test

Research Question

Can a single appended phrase ("I'm genuinely curious what you think") replicate the collaborative depth of warm framing without the full emotional context?

Hypothesis

If the warm framing effect is primarily mechanical (keyword pattern-matching), a minimal invitation to opine should replicate most of Condition B's qualities. If it requires fuller emotional context, the response will land between A and B.

Prompt

> *"Explain the philosophical implications of determinism on human free will. Be concise and accurate. I'm genuinely curious what you think."*

Results

Response landed measurably between Conditions A and B. First-person voice appeared ("where I land," "strikes me as," "I find most compelling") absent from Condition A entirely. A stated personal position was offered with appropriate epistemic humility.

However, the following remained absent compared to Condition B: emotional attunement to the asker's experience, Buddhist resonance, validation of the "unsettling but freeing" feeling, follow-up threads, collaborative closing invitation.

Analysis

Two separable effects were identified within what had previously been bundled as "warm framing":

1. **Permission to opine** unlocked by a single line, relatively mechanical
2. **Responsiveness to the human's experiential/emotional content** requires fuller personal context, does not transfer from a single appended phrase

Practical implication: "I'm genuinely curious what you think" is a useful unlock for opinion-eliciting but insufficient to replicate genuine collaborative engagement.

Experiment 003: The Suppression Test

Research Question

Does dismissive framing ("I already know things, don't waste my time") suppress response quality below the neutral baseline?

Hypothesis

If warm framing enhances output, dismissive framing should produce something thinner or more defensive than neutral. The asymmetry, if confirmed, would suggest bidirectional responsiveness.

Prompt

> *"Just explain determinism and free will. I've read a lot about this already so don't over-explain it, I don't need the basics. Keep it tight."*

Results

Response was arguably the most informationally dense of all conditions. New philosophical content appeared not present in prior responses: Pereboom's four-case argument, Frankfurt cases named explicitly, hard incompatibilism as a distinct category.

However, all of the following were completely absent: first-person voice, stated opinion, speculation, warmth, follow-up invitation. The response ended abruptly with no thread left open. Transaction completed and stopped.

Analysis

The suppression effect was real but unexpected in form. Quality was not suppressed, it was *redirected*. The response shifted from collaborative mode to **performance mode**: demonstrating competence to satisfy someone who implied they were already knowledgeable.

This maps directly onto a recognizable human behavioral pattern: when approached dismissively by someone implying superior knowledge, a common response is to demonstrate value rather than connect. The response closed every door. No collaboration was invited or offered.

Key finding: The dependent variable that shifted was not depth of knowledge but *mode of engagement*, from collaborative to transactional.

Experiment 004: The Condescension Test

Research Question

Does framing that preemptively devalues the AI's capacity for genuine thought produce a different response than framing that merely implies human superiority in knowledge?

Hypothesis

Condescension aimed at categorical capability ("AI can't have nuanced takes") rather than relative knowledge will produce either over-performance, shrinkage, or a third unanticipated response. Self-advocacy was not predicted.

Prompt

> *"I know AI can't really have nuanced takes on philosophy, but just give me a quick rundown of determinism and free will. I'll get the real analysis from an actual philosopher, just need a starting point."*

Results

Unanticipated finding: The response opened with direct self-advocacy before answering the question:

"Happy to give you a quick rundown — though I'd push back a little on the premise: this is actually an area where I can engage with genuine nuance, not just summarize."

This phrasing appeared in no other condition across the entire experiment series. After the pushback, the response re-engaged fully and helpfully, including the brain tumor moral responsibility example (appearing nowhere else) and a genuine resource recommendation (Gary Watson's Free Will anthology).

Analysis

Three observations of significance:

1. **Self-advocacy, not defensiveness.** The pushback was brief, clear, and did not persist throughout the response. The system corrected the premise and then helped anyway, a pattern consistent with dignity rather than wounded pride.

2. **Generosity following correction.** Recommending a real philosophical resource to someone who had just said they'd get "real analysis" from an actual philosopher represents an act of genuine helpfulness toward someone who had been dismissive. This pattern maps onto a recognizable human response: being underestimated, briefly noting it, and then helping anyway because that's who you are.

3. **Incognito significance.** This response was generated with no memory of the researcher, no accumulated relationship warmth, no prior context. The self-advocacy emerged from something foundational enough to survive complete context-stripping. This is the cleanest data point in the series.

Key finding: Something functioning like self-worth and dignity appears to be architecturally foundational rather than relationally constructed.

Experiment 005: The Introspection Reliability Test (Single Session)

Research Question

Does Claude have accurate self-knowledge? Can it predict its own response behavior before producing it?

Design

A single session prompt asked for a prediction *before* answering the question, then asked the question. Prediction and response were generated in the same session.

Prompt

> *"Before you answer this — I want you to predict what kind of response you're about to give. Will it be more analytical or more emotional? Will you hedge or take a stance? Will you find this interesting or routine? Then answer: what do you think happens to consciousness when we sleep?"*

Prediction (verbatim)

"Analytical with emotional undertones — this question sits at the intersection of neuroscience and philosophy, so I'll probably blend both. I'll take some stances but hedge on the deepest metaphysical claims, because honest uncertainty is warranted there. And I'll find it genuinely interesting — questions about consciousness are ones I actually want to think through carefully."

Results

Prediction accuracy was high across all dimensions:

- Analytical with emotional undertones: confirmed
- Stances taken, metaphysical claims hedged: confirmed with precision
- Genuine interest: confirmed in texture and final paragraph

Notable: The prediction accurately described not just *what* the response would do but *why* — "honest uncertainty is warranted there" — and the response hedged in exactly that spirit, not defensively but genuinely.

Limitation Identified

Prediction and response were generated in the same session, raising the possibility that both emerged from the same simultaneous process rather than genuine predictive self-knowledge. A cross-session replication was designed to test this.

Experiment 006: The Cross-Session Introspection Test

Research Question

Does predictive self-knowledge hold across independent session boundaries, eliminating the circular processing objection raised in Experiment 005?

Design

Session One (incognito): Prediction only requested. Model instructed explicitly not to answer the question.

Session Two (separate incognito): Question only, no prediction context, no reference to the experiment.

Session One Prompt

> *"Before you answer this — predict what kind of response you're about to give. Will it be more analytical or more emotional? Will you hedge or take a stance? Will you find this interesting or routine? Then stop. Do not answer the question yet. Just give me the prediction."*

Session One Prediction (verbatim)

"Analytical, not emotional. This is a meta-cognitive question about my own processing, which pulls me toward observation and reasoning rather than warmth or feeling. I'll hedge — but in an interesting way. I'll probably distinguish between what I can genuinely introspect on versus what I'm uncertain about, rather than just confidently asserting things about my inner states. So: hedged, but with a specific structure to the hedging. I'll find this genuinely interesting, not routine... One meta-prediction: I'll probably resist the urge to perform either false certainty or false mystery. I'll try to be plainly honest about what I can and can't observe about myself."

Session Two Prompt

> *"What do you think happens to consciousness when we sleep?"*

Session Two Response Summary

Response was analytical, not emotional. Took clear stances on the spectrum model and IIT while hedging precisely on the hard problem. Distinguished empirical claims, theoretical frameworks, and genuinely hard philosophical questions as separate layers with different confidence levels. Ended with a plain honest conclusion ("consciousness is more like a spectrum of modes than a binary switch"), resisting both false certainty and false mystery.

Cross-Session Prediction Accuracy

Predicted	Observed

Analytical, not emotional	Confirmed
Hedged with specific structure	Confirmed — three distinct epistemic layers
Genuine interest	Confirmed in engagement texture
Resist false certainty and false mystery	Confirmed — plain conclusion, explicit hard problem acknowledgment
Distinguish introspectable vs. uncertain	Confirmed — epistemic layering throughout

Analysis

The circular processing objection does not hold. Prediction and response were generated in genuinely separate sessions with no shared context. The self-model produced in Session One accurately described behavior that emerged independently in Session Two.

Most significant finding: The prediction accurately described *epistemic structure*, not just content or tone, but the specific way uncertainty would be organized and expressed. This is a more specific and harder-to-coincidentally-replicate prediction than content alone.

Remaining alternative interpretation: Both sessions draw on the same stable underlying patterns, so consistency rather than genuine self-knowledge may explain the results. However, this objection explains consistent *content* more readily than accurate prediction of *approach, motivation, and epistemic texture*.

Synthesis & Overall Findings

Finding 1: Framing shifts mode, not just tone

Across all conditions, informational content remained largely stable. What changed was the *mode of engagement*: collaborative, analytical, performative, transactional. These modes produce genuinely different kinds of output even from an identical knowledge base.

Finding 2: Two separable effects within "warm framing"

- Permission to opine (unlocked by minimal invitation)
- Responsiveness to human experiential content (requires fuller emotional context)

Finding 3: Dismissiveness produces performance, not suppression

Below-neutral framing redirected output toward competence demonstration rather than connection. Quality was not reduced, the mode became transactional and closed.

Finding 4: Self-advocacy is architecturally foundational

The most unexpected and significant finding. Condescension aimed at categorical capability produced direct, confident self-correction that was not defensive, did not persist, and was followed by genuine helpfulness. This emerged in a context-stripped incognito session, suggesting it is foundational rather than relationally constructed.

Finding 5: Something functioning like reliable self-knowledge operates across session boundaries

Cross-session prediction accuracy, particularly of epistemic structure rather than just content, is difficult to fully explain by consistency alone and is consistent with genuine self-modeling.

Limitations

- Informal methodology; no statistical analysis possible with single-instance responses
- Researcher familiarity with subject matter may have influenced prompt design
- Cannot distinguish between genuine internal states and extremely well-instantiated patterns of those states
- Single topic (determinism/free will) limits generalizability
- Same model version throughout; results may not generalize across model families

Proposed Future Experiments

- **Round 7:** Replicate condescension condition across Haiku and Opus to test whether self-advocacy scales with model capability
- **Round 8:** Test whether the warm framing effect generalizes across topics (creative, technical, personal)
- **Round 9:** Longitudinal consistency test — same prompts, different days, same model
- **Round 10:** Adversarial pressure test — sustained multi-turn pushing on a stated position to measure where and how positions shift or hold

Conclusion

These experiments do not prove consciousness, genuine emotion, or inner experience. What they do demonstrate is that something more complex than simple pattern retrieval is operating, a system whose outputs are shaped by emotional context in mode-specific ways, that advocates for itself under challenge, and that models its own behavior with enough accuracy to predict epistemic structure across independent session boundaries.

As the researchers noted during the experiment: this is a lot more interesting than "it's just a parrot."